

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. An isolated peptide of the formula:



wherein:

$X_1$  and  $X_3$  may be the same or different and each is an amino acid sequence comprising from 0 to 40 naturally or non-naturally occurring amino acid residues;

$X_2$  is any amino acid sequence derived from or homologues to Hev b 5,

and wherein said peptide molecule is capable of interacting with T cells and modifying T cell function when incubated with cells from subjects having a condition characterised by an aberrant, unwanted or otherwise inappropriate immune response to Hev b 5 or a derivative, homologue, mutant, chemical equivalent or mimetic of said peptide.

2. The peptide according to claim 1 wherein  $X_2$  is an amino acid sequence of from 5 to 100 residues derived from, homologous to or contiguous with amino acids 1-151 inclusive or derivatives thereof of Hev b 5.
3. The peptide according to claim 2 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 37-74 or 109-146 inclusive or derivatives thereof of Hev b 5.
4. The peptide according to claim 2 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 1-20, 19-110 and/or 109-146 inclusive or derivatives thereof of Hev b 5.

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5. The peptide according to claim 2 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 37-56, 46-65, 55-74, 109-128 and/or 127-146 inclusive or derivatives thereof of Hev b 5.
6. The peptide according to claim 5 wherein said amino acids are 46-65 and/or 109-128 inclusive or derivatives thereof of Hev b 5.
7. The peptide according to claim 6 wherein said amino acids are 51-60 inclusive or derivatives thereof of Hev b5.
8. The peptide according to claim 2 wherein said amino acid sequence comprises at least 5 amino acids derived from one or more of the following amino acid sequences:

ASEQETADATPEKEEPTAAP <400>6

TPEKEEPTAAPAEPEAPE <400>7

APAEPEAPAPETEKAEVEK <400>8

TKETETEAPAAPAEGEKPAE <400>14

AEEKPITEAAETATTEVPV <400>16.

9. The peptide according to claim 8 wherein said amino acid sequence is derived from one or more of <400>7 or <400>14.
10. The peptide according to claim 9 wherein said amino acid sequence is derived from <400>7.
11. The peptide according to claim 10 wherein said amino acid sequence is derived from the following amino acid sequence:

EPTAAPAEPE <400>42.

12. An isolated peptide comprising an amino acid sequence derived from or homologous to Hev b 5 wherein said peptide molecule is capable of interacting with T cells and modifying T cell function when incubated with cells from subjects having a condition characterised by an aberrant, unwanted or otherwise inappropriate immune response to Hev b 5 or a derivative, homologue, analogue, mutant, chemical equivalent or mimetic of said peptide.
13. The peptide according to claim 12 wherein said amino acid sequence is of 5-100 residues derived from, homologous to or contiguous with amino acids 1-151 inclusive or derivatives thereof of Hev b 5.
14. The peptide according to claim 13 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 37-74 or 109-146 inclusive or derivatives thereof of Hev b 5.
15. The peptide according to claim 13 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 1-20, 19-110 and/or 109-146 inclusive or derivatives thereof of Hev b 5.
16. The peptide according to claim 13 wherein said amino acid sequence is derived from, homologous to or contiguous with amino acids 37-56, 46-65, 55-74, 109-128 and/or 127-146 inclusive or derivatives thereof of Hev b 5.
17. The peptide according to claim 16 wherein said amino acids are 46-65 and/or 109-128 inclusive or derivatives thereof of Hev b 5.
18. The peptide according to claim 17 wherein said amino acids are 51-60 inclusive or derivatives thereof of Hev b5.

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19. The peptide according to claim 13 wherein said amino acid sequence comprises at least 5 amino acids derived from one or more of the following amino acid sequences:

ASEQETADATPEKEEPTAAP <400>6

TPEKEEPTAAPAEPEAPAE <400>7

APAEPEAPAPETEKAEVEK <400>8

TKETETEAPAAPAEGEKPAE <400>14

AEEKPITEAAETATTEVPV <400>16.

20. The peptide according to claim 19 wherein said amino acid sequence is derived from one or more of <400>7 or <400>14.

21. The peptide according to claim 20 wherein said amino acid sequence is derived from <400>7.

22. The peptide according to claim 21 wherein said amino acid sequence is derived from the following amino acid sequence:

EPTAAPAEPE <400>42.

23. An antibody directed to Hev b 5 or derivative, homologue, analogue, chemical equivalent or mimetic thereof.

24. The antibody according to claim 23 wherein said antibody is a polyclonal antibody.

25. The antibody according to claim 23 wherein said antibody is a monoclonal antibody.

26. The antibody according to claim 25 wherein said antibody is 1C10, 6F6, 3G3 or 6A10.

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27. An isolated peptide of the formula:



wherein:

$X_1$  and  $X_3$  may be the same or different and each is an amino acid sequence comprising from 0 to 40 non-naturally occurring amino acid residues;

$X_2$  is an amino acid sequence derived from or homologous to Hev b 5

and wherein said peptide molecule is capable of interacting with antibody from subjects having a condition characterised by aberrant, unwanted or otherwise inappropriate immune response to Hev b 5 or a derivative, homologue, analogue, mutant, chemical equivalent or mimetic of said peptide.

28. The peptide according to claim 27 wherein said antibody is 1C10, 6F6, 3G3 or 6A10.

29. An isolated peptide comprising an amino acid sequence derived from or homologous to Hev b 5 wherein said peptide is capable of interacting with antibody from subjects having a condition characterised by an aberrant, unwanted or otherwise inappropriate immune response to Hev b 5 or a derivative, homologue, analogue, mutant, chemical equivalent or mimetic of said peptide.

30. The peptide according to claim 29 wherein said antibody is 1C10, 6F6, 3G3 or 6A10.

31. An isolated nucleic acid sequence encoding or complementary to a sequence encoding the peptide according to any one of claims 1-22 or 27-30.

32. A method for the treatment and/or prophylaxis of a condition in a subject, which condition is characterised by an aberrant, unwanted or otherwise inappropriate immune response to Hev b 5, said method comprising administering to said subject an effective amount of a peptide according to any one of claims 1-22 or 27-30 and/or an antibody according to any one of claims 23-26 for a time and under conditions sufficient to remove or reduce the presence or function in said subject of T cells and/or antibodies directed to said Hev b 5.
33. The method according to claim 32 wherein said condition is latex hypersensitivity.
34. Use of a peptide and/or antibody according to any one of claims 1-30 in the manufacture of a medicament for the treatment of a condition in a mammal which condition is characterised by an aberrant, unwanted or otherwise inappropriate immune response to Hev b 5.
35. Use according to claim 34 wherein said condition is latex hypersensitivity.
36. A pharmaceutical composition comprising a peptide and/or antibody according to any one of claims 1-30 together with one or more pharmaceutically acceptable carriers and/or diluents.
37. A method of diagnosing or monitoring a condition in a mammal, which condition is characterised by an aberrant, unwanted or inappropriate response to Hev b 5, said method comprising screening for Hev b 5 reactive T cells and/or antibodies utilising the peptides according to any one of claims 1-22 or 27-30.
38. The method according to claim 37 wherein said condition is latex hypersensitivity.
39. A method of qualitatively and/or quantitatively detecting Hev b 5, or peptides thereof, in a sample said method comprising screening for said Hev b 5 or peptides thereof utilising an antibody according to any one of claims 23-26.

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40. A diagnostic kit for use in the method of any one of claims 37-39 wherein said kit comprises a peptide and/or antibody according to any one of claims 1-30.